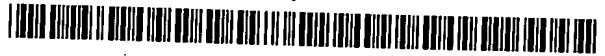


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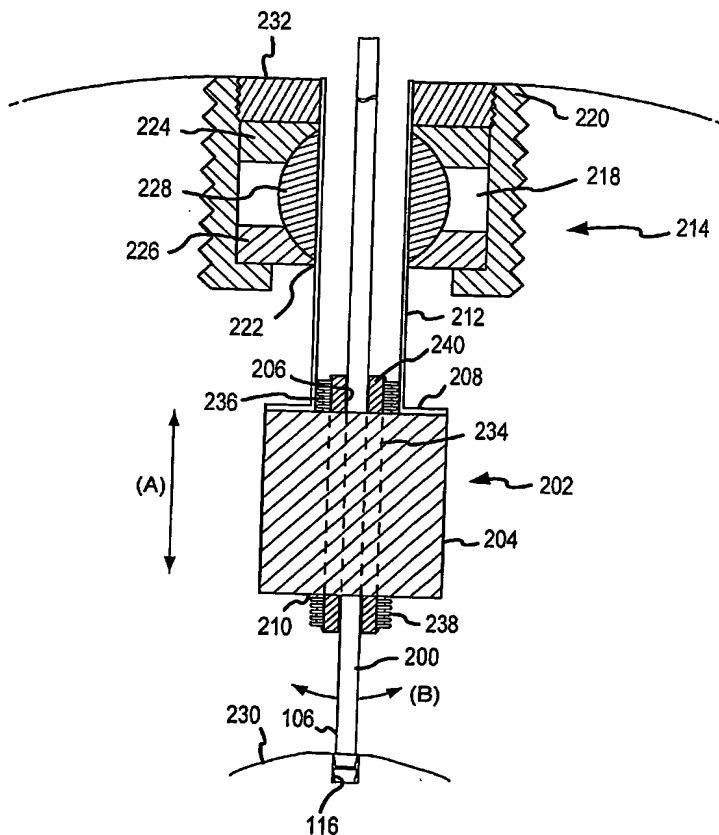
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(54) Title: IMPROVED APPARATUS AND METHOD FOR OSSICULAR FIXATION OF IMPLANTABLE HEARING AID ACTUATOR



(57) Abstract: The invention is directed to a fixation apparatus and method for interfacing an implantable hearing aid actuator with the ossicular chain of a patient. The fixation apparatus may include one or more surface discontinuities to enhance tissue fixation and thereby yield enhanced mechanical coupling and vibratory response. Surface discontinuities may be in the form of surface pores, surface asperities and complex surface shapes such as grooves, slots, lips or openings formed in the fixation apparatus. The fixation apparatus may also and/or alternatively include a portion or component that is deflectable or that comprises a conditioned shape memory material that is activatable at bodily temperatures to yield a degree of lateral loading when the fixation apparatus is positioned within an opening defined within a bone of the ossicular chain of a patient, thereby yielding enhanced mechanical coupling.

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